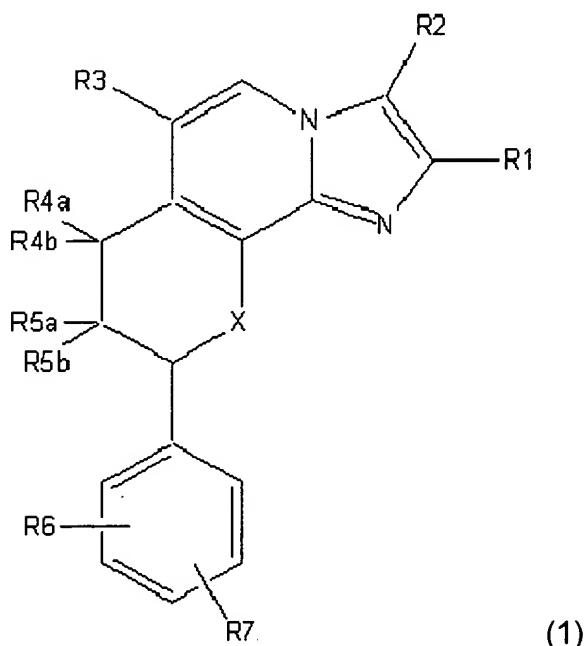


## Appendix A

### *Claim Amendments*

1.-14. (Canceled)

15. (Currently Amended) A compound of the formula 1,



in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is 1-4C-alkoxy or 1-4C-alkoxy-1-4C-alkoxy,

R5a is the radical -OR',

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is O (oxygen) or NH,

and where

R' is selected from the group consisting of

-C(O)-NR8R9,

-C(O)-alk-NR8R9,

-C(O)-alk-C(O)-NR8R9,

-P(O)(OH)2,

-S(O)2NR8R9,

-C(O)-R8,

-C(O)-C6H3R10R11,

-C(O)-OR8,

-C(O)-alk-C(O)-R8,

-C(O)-alk-C(O)-OR8,

-C(O)-C(O)-R8, and

-C(O)-C(O)-OR8 and

-CH2-OR8,

where

alk is 1-7C-alkylene,

R8 is hydrogen, 1-10C-alkyl or 1-4C-alkyl substituted by halogen, carboxyl, hydroxyl, sulfo (-SO3H), sulfamoyl (-SO2NH2), carbamoyl (-CONH2), 1-4C-alkoxy or 1-4C-alkoxycarbonyl,

R9 is hydrogen or 1-4C-alkyl,

R10 is hydrogen, halogen, nitro, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, 1-4C-alkoxycarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino or trifluoromethyl and

R11 is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy.

or a ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

16. (Currently Amended) A compound as claimed in claim 15,

in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is 1-4C-alkoxy or 1-4C-alkoxy-1-4C-alkoxy,

R5a is the radical  $-OR'$ ,

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is O (oxygen) or NH,

and where

R' is selected from the group consisting of

$-C(O)-NR8R9$ ,

-C(O)-alk-NR8R9,  
-C(O)-R8,  
-C(O)—C<sub>6</sub>H<sub>3</sub>R10R11,  
-C(O)-OR8,  
-C(O)-alk-C(O)-OR8, and  
-C(O)-C(O)-OR8

where

alk is 1-4C-alkylene,

R8 is hydrogen, 1-4C-alkyl, 1-4C-alkyl substituted by 1-4C-alkoxy or menthyl,

R9 is hydrogen or 1-4C-alkyl,

R10 is hydrogen, halogen, nitro, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, or trifluoromethyl and

R11 is hydrogen or halogen,

or a ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

17. (New) A compound as claimed in claim 15,

in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is methoxyethoxy,

R5a is the radical -OR',

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is NH,

and where

R' is selected from the group consisting of

-C(O)-NR8R9,

-C(O)-alk-NR8R9,

-C(O)-R8,

-C(O)—C<sub>6</sub>H<sub>3</sub>R10R11,

-C(O)-OR8,

-C(O)-alk-C(O)-OR8, and

-C(O)-C(O)-OR8

where

alk is 1-4C-alkylene,

R8 is hydrogen, 1-4C-alkyl, 1-4C-alkyl substituted by 1-4C-alkoxy or menthyl,

R9 is hydrogen or 1-4C-alkyl,

R10 is hydrogen, halogen, nitro, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, or  
trifluoromethyl and

R11 is hydrogen or halogen,

or a ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

18. (Currently Amended) A compound as claimed in claim 15,

in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is methoxyethoxy,

R5a is the radical -OR',

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is NH,

and where

R' is selected from the group consisting of

-C(O)-alk-NR8R9,

-C(O)-R8,

-C(O)-OR8,

-C(O)-alk-C(O)-OR8, and

-C(O)-C(O)-OR8

where

alk is 1-4C-alkylene,

R8 is hydrogen, 1-4C-alkyl, 1-4C-alkyl substituted by 1-4C-alkoxy or menthyl,

R9 is hydrogen or 1-4C-alkyl,

or a ~~hydrate~~, solvate, salt, ~~hydrate of a salt~~ or solvate of a salt thereof.

19. (Currently Amended) A compound as claimed in claim 15,  
in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is methoxyethoxy,

R5a is the radical  $-OR'$ ,

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is NH,

and where

R' is selected from the group consisting of

$-C(O)-alk-NR8R9$ ,

$-C(O)-R8$ ,

where

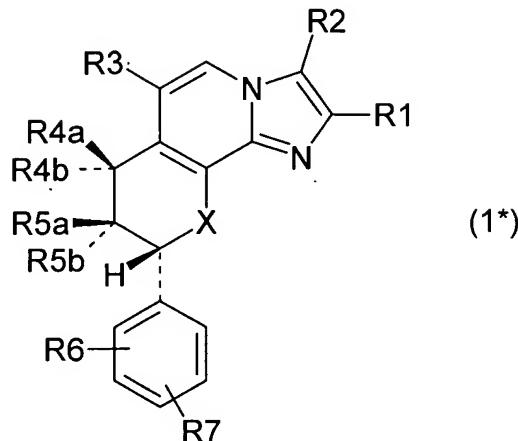
alk is 1-4C-alkylene,

R8 is 1-4C-alkyl or 1-4C-alkyl substituted by 1-4C-alkoxy,

R9 is hydrogen or 1-4C-alkyl,

or a ~~hydrate~~, solvate, salt, ~~hydrate of a salt~~ or solvate of a salt thereof.

20. (Currently Amended) A compound as claimed in claim 15, having the formula 1\*



in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is 1-4C-alkoxy or 1-4C-alkoxy-1-4C-alkoxy,

R5a is the radical -OR',

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is O (oxygen) or NH,

and where

R' is selected from the group consisting of

- C(O)-NR8R9,
- C(O)-alk-NR8R9,
- C(O)-R8,
- C(O)—C<sub>6</sub>H<sub>3</sub>R10R11,
- C(O)-OR8,
- C(O)-alk-C(O)-OR8, and
- C(O)-C(O)-OR8

where

alk is 1-4C-alkylene,

R8 is hydrogen, 1-4C-alkyl, 1-4C-alkyl substituted by 1-4C-alkoxy or menthyl,

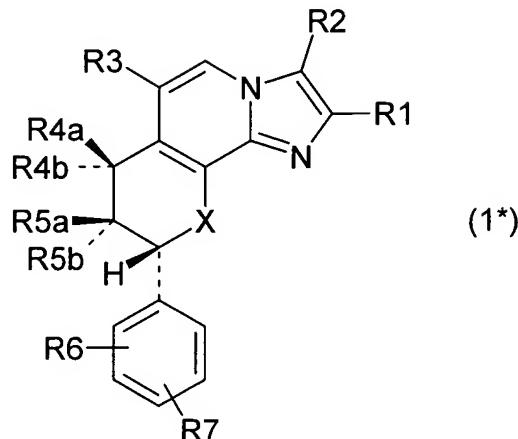
R9 is hydrogen or 1-4C-alkyl,

R10 is hydrogen, halogen, nitro, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, or trifluoromethyl and

R11 is hydrogen or halogen,

or a ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

21. (Currently Amended) A compound as claimed in claim 15, which has the formula 1\*



in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is methoxyethoxy,

R5a is the radical  $-OR'$ ,

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is NH,

and where

R' is selected from the group consisting of

$-C(O)-NR_8R_9$ ,

-C(O)-alk-NR8R9,  
-C(O)-R8,  
-C(O)—C<sub>6</sub>H<sub>3</sub>R10R11,  
-C(O)-OR8,  
-C(O)-alk-C(O)-OR8, and  
-C(O)-C(O)-OR8

where

alk is 1-4C-alkylene,

R8 is hydrogen, 1-4C-alkyl, 1-4C-alkyl substituted by 1-4C-alkoxy or menthyl,

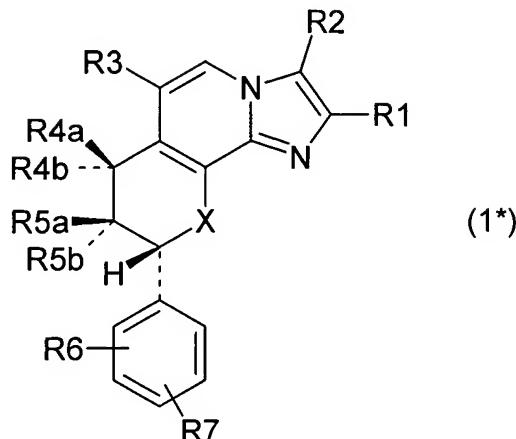
R9 is hydrogen or 1-4C-alkyl,

R10 is hydrogen, halogen, nitro, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, or trifluoromethyl and

R11 is hydrogen or halogen,

or a ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

22. (Currently Amended) A compound as claimed in claim 15, which has the formula 1\*



in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is methoxyethoxy,

R5a is the radical -OR',

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is NH,

and where

R' is selected from the group consisting of

-C(O)-alk-NR8R9,  
-C(O)-R8,  
-C(O)-OR8,  
-C(O)-alk-C(O)-OR8, and  
-C(O)-C(O)-OR8

where

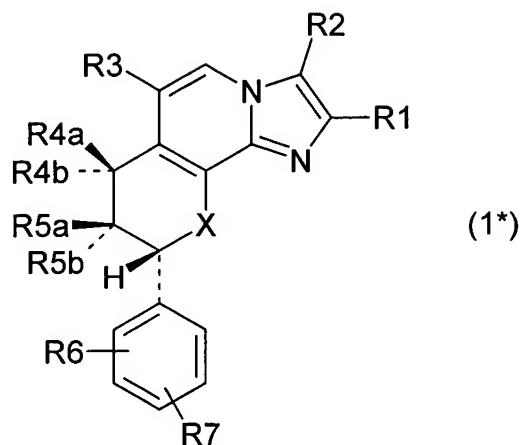
alk is 1-4C-alkylene,

R8 is hydrogen, 1-4C-alkyl, 1-4C-alkyl substituted by 1-4C-alkoxy or menthyl,

R9 is hydrogen or 1-4C-alkyl,

or a ~~hydrate~~, solvate, salt, ~~hydrate of a salt~~ or solvate of a salt thereof.

23. (Currently Amended) A compound as claimed in claim 15, which has the formula 1\*



in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is methoxyethoxy,

R5a is the radical  $-OR'$ ,

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is NH,

and where

R' is selected from the group consisting of

-C(O)-alk-NR8R9,

-C(O)-R8,

where

alk is 1-4C-alkylene,

R8 is 1-4C-alkyl or 1-4C-alkyl substituted by 1-4C-alkoxy,

R9 is hydrogen or 1-4C-alkyl,

or a ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

24. (Currently Amended) A compound which is (7R,8R,9R)-7-(2-Methoxyethoxy)-2,3-dimethyl-8-(N,N-dimethylaminomethyl-carbonyloxy)-9-phenyl-7,8,9,10-tetrahydroimidazo[1,2-h][1,7]naphthyridine, or a ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

25. (Currently Amended) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 15 and/or a pharmacologically tolerable ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof together with customary pharmaceutical excipients and/or vehicles.

26. (Currently Amended) A pharmaceutical composition comprising a therapeutically effective amount of (7R,8R,9R)-7-(2-Methoxyethoxy)-2,3-dimethyl-8-(N,N-dimethyl-aminomethyl-carbonyloxy)-9-phenyl-7,8,9,10-tetrahydroimidazo-[1,2-h][1,7]naphthyridine, and/or a pharmacologically tolerable ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof together with customary pharmaceutical excipients and/or vehicles.

27. (Currently Amended) A method of treating a gastrointestinal disorder illness caused by gastric acid in a patient comprising administering to a patient in need thereof a therapeutically effective amount of the compound as claimed in claim 15 and/or a pharmacologically tolerable ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

28. (Currently Amended) A method of treating a gastrointestinal disorder illness caused by gastric acid in a patient comprising administering to a patient in need thereof a therapeutically effective amount of (7R,8R,9R)-7-(2-Methoxyethoxy)-2,3-dimethyl-8-(N,N-dimethyl-aminomethyl-carbonyloxy)-9-phenyl-7,8,9,10-tetrahydroimidazo-[1,2-h][1,7]naphthyridine and/or a pharmacologically tolerable ~~hydrate, solvate, salt, hydrate of a salt~~ or solvate of a salt thereof.

29. (Currently Amended) The method according to claim 27, wherein the gastrointestinal disorder illness caused by gastric acid is selected from the group consisting of gastric ulcer, duodenal ulcer, gastritis, hyperacidic functional gastropathy, medicament-related functional gastropathy, reflux esophagitis, Zollinger-Ellison syndrome, heartburn and peptic ulcer bleeding.

30. (Currently Amended) The method according to claim 28, wherein the gastrointestinal disorder illness caused by gastric acid is selected from the group consisting of gastric ulcer, duodenal ulcer, gastritis, hyperacidic functional gastropathy, medicament-related functional gastropathy, reflux esophagitis, Zollinger-Ellison syndrome, heartburn and peptic ulcer bleeding.